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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,082	01/29/2007	Davy Jacobs	S1022.71021US00	6131
46329 7590 05/12/2010 STMicroelectronics Inc. c/o WOLF, GREENFIELD & SACKS, P.C. 600 Atlantic Avenue BOSTON, MA 02210-2206				
EXAMINER VERDL KIMBLEANN C				
ART UNIT 2194		PAPER NUMBER		
NOTIFICATION DATE 05/12/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/561,082

**Applicant(s)**

JACOPS ET AL.

**Examiner**

KimbleAnn Verdi

**Art Unit**

2194

**Period for Reply** -- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 4 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2010 and 16 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-24 are pending in the current application.

#### ***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

3. The substitute specification filed 12/16/2005 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: the amendments of "consists of" to "comprises" on page 23, line 6, page 26, lines 4 and 6, and page 30, line 27 contain new matter. The recitation of "comprises" is an open ended transitional phrase versus the original recitation of "consists of" which is a closed term. The open ended transitional phrase broadens the origin of what was originally disclosed in applicant's specification.

***Claim Objections***

4. Claims 1-9 and 13 are objected to because of the following informalities:
  - a. Claim 1, line 4, the recitation of "the software application", should be -the embedded software application-. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-9, 13-17, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

7. **Claim 1** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite because the metes and bounds of the claim cannot clearly be ascertained. It is unclear whether the interface, SW protocol layers, embedded software application, and the processor are part of the claimed library. Applicant appears to be claiming the function of the elements as part of the library but not the elements themselves.

8. **Claims 2-9 and 13** did not cure the deficiencies of claim 1.

9. **Claim 14** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite because the metes and bounds of the claim are not clear. Elements of the claimed API are not provided, only functions of the API are described. Applicant claims an API that provides functions and communicating towards an underlying operating system; however no elements of the API are claimed.

10. **Claims 15-16** did not cure the deficiencies of claim 14.

11. **Claim 17** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite because the metes and bounds of the claim cannot clearly be ascertained. It is unclear whether the layers of the telecommunications protocol communicating towards the underlying OS is part of the claimed method of embedding a software application, since the limitation of "generating an API for communicating towards at least one of an underlying OS, layers of a telecommunications protocol, and any hardware" implies the layers of the telecommunications protocol is not required for the claimed method.

12. **Claim 22** has the same deficiencies as claim 17.

13. **Claim 3** contains the trademark/trade name BLUETOOTH™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used

properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe short range wireless device and, accordingly, the identification/description is indefinite.

***Claim Rejections - 35 USC § 101***

**14. 35 U.S.C. 101 reads as follows:**

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**15. Claims 1-8 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

**16. Claim 1** recites "a library of software program products" however; it appears that a library of software program products would reasonably be interpreted by one of ordinary skill in the art as software, per se since the body of the claim appears to be software. Applicant claims a set of routines and software as described by Applicant's specification, appear to be software structures. However, software structures are nonstatutory when claimed without reciting a tangible embodiment of the system. Applicant describes the functionality a set of routines and software but does not disclose any hardware structure. As such, it is believed that a library of software program products claim 1 is reasonably interpreted as not limited to a practical application, per se and non statutory.

17. **Claims 2-8** did not cure the deficiencies of claim 1.

18. **Claim 22** is directed to a process (method), however, the process is not limited to a particular practical application and does not pass the machine-or-transformation test since the machine is not particular, as such the claims are not directed to statutory subject matter. In contrast, a process claim which explicitly recites the particular machine or apparatus, recites a step that inherently involves the use of a particular machine or apparatus, or particularly transforms a particular article to a different state or thing is therefore directed to statutory subject matter. Appropriate correction or amendment is required.

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. **Claims 1-24 are rejected under 35 U.S.C. 102(b) as being unpatentable over Motorola (“JAVA™ APIs for BLUETOOTH™ Wireless Technology (JSR-82)”, previously cited) in view of Atkinson et al. (hereinafter Atkinson) (U.S. Publication No. 2002/0012329 A1).**

21. **As to claim 1**, Motorola teaches the invention substantially as claimed including a library of software program products, the library comprising a set of routines (**javax.bluetooth package, page 11, section 3.3.1, lines 1-10**) for an embedded software application (**game application, pages 5 and 6, section 2.2.4, lines 1-15**) requiring software (SW) protocol layers (**page 6, section 2.3, lines 7-11**), profiles (**pages 6 and 7, section 2.3, lines 12-16**) or application code (**BLUETOOTH™ Control Center, page 5, section 2.2.3, lines 16-19**) embedded on a processor (**page 5, section 2.2.2, lines 1-8**), the library further comprising software for an interface (**JSR-82**) between the software application running on the processor (**game application, pages 5 and 6, section 2.2.4, lines 1-15**) and the SW protocol layers (**BLUETOOTH™ Protocols**) and/or the profiles (**BLUETOOTH™ profiles**) or the application code (**page 1, Section 1.2.1, lines 9-11**).

22. Motorola does not explicitly disclose the interface and the SW protocol layers communicating towards an underlying operating system (OS) through an abstraction layer that maps OS-independent function calls to OS-specific function calls.

23. However teaches the interface (**API 116, Figure 4**) and the SW protocol layers (**protocol stack 122, Figure 3**) communicating towards an underlying operating system (OS) (**operating system environment 113, Figure 2**) through an abstraction layer (**software layer 101, Figure 3**) that maps (**abstracts connectivity**) OS-independent function calls to OS-specific function calls (**"abstract the nature of the connectivity**



***between a particular operating system the processor 103 operates under”, paragraph 0050], lines 45-50).***

24. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified API of Motorola with the teachings of software support layer from Atkinson because this feature would have provided a mechanism to abstract out a particular processor architecture, and if an operating system is also used, the nature of the connectivity between a particular operating system the processor operates under (***paragraph [0050], lines 45-50 of Atkinson).***

25. **As to claim 2**, Motorola teaches wherein the interface (JSR-82) is between the software application running on the processor (game application, pages 5 and 6, section 2.2.4, lines 1-15) and a telecommunications module (BIUETOOTH™ protocol, page 6, section 2.2.4, lines 7-10).

26. **As to claim 3**, Motorola teaches wherein the telecommunications module is a BIUETOOTH™ lower layer SW protocol (BIUETOOTH™ protocol, page 6, section 2.2.4, lines 7-10).

27. **As to claim 4**, Motorola teaches wherein the interface uses telecommunications controller interface communications (HCI, Figure 3-1).

28. **As to claim 5**, Motorola teaches wherein the communications are HCI communications (HCI , Figure 3-1) for communication with the telecommunications module (L2CAP, Figure 3-1).

29. **As to claim 6**, Motorola teaches wherein the software application (game application, pages 5 and 6, section 2.2.4, lines 1-15) communicates (using BLUETOOTH™ communications, page 6, section 2.2.4, lines 7-10) with a telecommunications module (L2CAP, page 6, section 2.3, lines 5-8) for executing a telecommunications protocol (establish L2CAP connection, page 7, section 2.3, lines 21-24).

30. **As to claim 7**, Motorola teaches wherein the software application (game application, pages 5 and 6, section 2.2.4, lines 1-15) communicates with a hardware input/output interface (phone or PDA, section 2.2.4, page 6, lines 11-15).

31. **As to claim 8**, Motorola teaches a computer readable medium (memory, section 2.2.2, page 5, lines 4-5).

32. **As to claim 9**, Motorola teaches wherein the medium is a CD-ROM or DVD-ROM or a memory or data storage device (memory, section 2.2.2, page 5, lines 4-5).

33. **As to claim 10**, this claim is rejected for the same reasons as claim 1 above. In addition Motorola teaches a telecommunications device (BLUETOOTH™ device, page 5, section 2.2.2, lines 1-12, MIDP device, section 3.3.2, page 11, line1) an interface executing on the telecommunications device (BLUETOOTH™ API, section 3.3.2, page 12, Figure 3-5) towards an underlying operating system (OS) (page 12, section 3.3.2, Figure 3-5) , layers of a telecommunications protocol (BLUETOOTH™ Stack, section 3.3.2, page 12, Figure 3-5) and optionally towards any hardware available for an embedded application (Bluetooth Radio Hardware, section 3.2, page 9, Figure 3-1).

34. **As to claim 11**, this claim is rejected for the same reasons as claim 1 since claim 11 recites the same or equivalent invention, see the rejection to claim 1 above.

35. **As to claim 12**, Motorola teaches wherein the interface is an API (JSR-82, page 4, section 2.1, lines 1-8).

36. **As to claim 13**, this claim is rejected for the same reasons as claim 1 since claim 13 recites the same or equivalent invention, see the rejection to claim 1 above. In addition Motorola teaches a Host processing system (Kiosk or Vending machine, page 6, section 2.2.4, lines 16-36).

37. **As to claim 14**, this claim is rejected for the same reasons as claims 1 and 10 since claim 14 recites the same or equivalent invention, see the rejection to claims 1 and 10 above.

38. **As to claim 15**, this claim is rejected for the same reasons as claim 5 since claim 15 recites the same or equivalent invention, see the rejection to claim 5 above.

39. **As to claim 16**, this claim is rejected for the same reasons as claim 8 since claim 16 recites the same or equivalent invention, see the rejection to claim 8 above.

40. **As to claim 17**, this claim is rejected for the same reasons as claim 14 since claim 17 recites the same or equivalent invention, see the rejection to claim 14 above

41. **As to claim 18**, this claim is rejected for the same reasons as claim 10 since claim 18 recites the same or equivalent invention, see the rejection to claim 10 above.

42. **As to claim 19**, this claim is rejected for the same reasons as claim 12 since claim 19 recites the same or equivalent invention, see the rejection to claim 12 above.

43. **As to claim 20**, this claim is rejected for the same reasons as claim 10 since claim 20 recites the same or equivalent invention, see the rejection to claim 10 above.

44. **As to claim 21**, this claim is rejected for the same reasons as claim 12 since claim 21 recites the same or equivalent invention, see the rejection to claim 12 above.

45. **As to claims 22-24**, these claims are rejected for the same reasons as claims 17-19 since claims 22-24 recite the same or equivalent invention, see the rejections to claims 17-19 above.

#### ***Response to Arguments***

46. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

47. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

48. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

49. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KimbleAnn Verdi whose telephone number is (571)270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

50. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

51. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hyung S. Sough/  
Supervisory Patent Examiner, Art Unit 2194  
05/09/10

KV  
May 8, 2010